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09/985,902	11/06/2001	W. Ben Hunt	10493-0001	4539

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EXAMINER

NGUYEN, PHU K

ART UNIT	PAPER NUMBER
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2671

DATE MAILED: 03/01/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/985,902

Applicant(s)

HUNT ET AL.

Examiner

Phu K. Nguyen

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE ____ MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 06 November 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-33 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-33 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. ____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.



Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 4.
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: ____.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 1-26 are rejected under 35 U.S.C. 103(a) as being unpatentable over HAGMEIER et al. (6,606,528) in view of RAPPOPORT (6,614,430).

As per claim 1, and similar claims 21, 24, Hagmeier teaches the claimed "method of representing a plurality of entities as real object vector representations" comprising the steps of: (a) obtaining a data file (Hagmeier, column 7, lines 10-20); (b) for each entity in the drawing, identifying at least one vector graphic within the data file (Hagmeier, column 7, lines 35-41); (c) creating a computer-storable object that is comprised of the identified at least one vector graphic (Hagmeier, column 8, lines 1-8); and (d) attaching metadata to the computer-storable object (Hagmeier, column 8, lines 33-42). It is noted that Hagmeier does not teach that the data file is a drawing.

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Rappoport teaches that the CAD data file can be a drawing (Rappoport, column 16, Table 1) in which the objects is approximated by the parameter functions representing the objects. Thus, it would have been obvious to a person of ordinary skill in the art at the time the invention was made, in view of the teaching of Rappoport, to configure Hagmeier's method as claimed because the approximation of a 3D object in a drawing by a set of parameter functions representing the outlines or boundaries of object has been widely known in the computer graphic art.

Claim 2 adds into claim 1 "the drawing is a raster image and step (a) additionally comprises the step of: (i) converting the raster image into a vector-based image" which Rapport teaches in Table 1, 2D drawings. Thus, it would have been obvious to a person of ordinary skill in the art at the time the invention was made, in view of the teaching of Rappoport, to configure Hagmeier's method as claimed because the approximation of a 3D object in a drawing by a set of parameter functions representing the outlines or boundaries of object has been widely known in the computer graphic art.

Claim 3 adds into claim 2 "creating a vector-based image corresponding to the raster image using a vector graphics editor" which Hagmeier suggests in column 7, lines 10-41.

Claim 4 adds into claim 2 "the drawing is a raster image and step (a)(i) comprises creating a vector-based image corresponding to the raster image through an auto-tracing application" which Rapport teaches in Table 1, 2D drawings. Thus, it would have been obvious to a person of ordinary skill in the art at the time the invention was

made, in view of the teaching of Rappoport, to configure Hagmeier's method as claimed because the approximation of a 3D object in a drawing by a set of parameter functions representing the outlines or boundaries of object has been widely known in the computer graphic art.

Claim 5 adds into claim 1 "the drawing is a paper drawing, and step (a) comprises: (i) scanning the drawing creating a raster image; and (ii) converting the raster image into a vector-based image" which Rapport teaches in Table 1, 2D drawings, conceptual drawings. Thus, it would have been obvious to a person of ordinary skill in the art at the time the invention was made, in view of the teaching of Rappoport, to configure Hagmeier's method as claimed because the approximation of a 3D object in a drawing by a set of parameter functions representing the outlines or boundaries of object has been widely known in the computer graphic art.

Claim 6 adds into claim 5 "creating a vector-based image corresponding to the raster image using a vector graphics editor" which Hagmeier suggests in column 7, lines 10-41.

Claim 7 adds into claim 5 "creating a vector-based image corresponding to the raster image through an auto-tracing application" which Hagmeier suggests in column 7, lines 10-41; and Rappoport, in Table 1, Detail Geometry.

Claim 8 adds into claim 1 "drawing is a CAD format file and step (a) additionally comprises the step of converting the CAD format file into a format that can be viewed in a graphics editor" which Rapport teaches in figure 1B.

Claim 9 adds into claim 8 "the format that can be viewed in a graphics editor is

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selected from the group consisting of DWG, CDR, WMF and FLA" which Hagmeier suggests in column 1, lines 45-48, and Happort in column 12, lines 45-54.

Claim 10 adds into claim 1 "selecting at least one graphic vector in an application" which Hagmeier teaches in B-Spline Analysis (column 6, lines 19-41).

Claim 11 adds into claim 10 "a user using the application selects individual graphic vectors using a pen and tablet interface" which Happort teaches in the sketch drawings, table 1.

Claim 12 adds into claim 10 "the application automatically selects graphic vectors upon a user selecting contiguous graphic vectors" which Hagmeier teaches in column 9, lines 28-61.

Claim 13 adds into claim 1, and similar claims 22, 25, "the computer-storable object is a Macromedia Flash symbol" which would have been obvious because any well known type of object can be used such as a Macromedia Flash Symbol

Claim 14 adds into claim 1 "generating at least one script and attaching the at least one script to the computer-storable object" which Hahmeier teaches in column 10, lines 10-33.

Claim 15 adds into claim 14 "said at least one script causes the computer-storable object to highlight vector graphics when viewed in a viewing application upon a predetermined event" which would have been obvious because the user can program to highlight any region of interest.

Claim 16 adds into claim 15 "said predetermined event is selected from the group consisting of a mouse click on the object in the viewing application and a mouse rollover

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on the object in the viewing application" which Hagmeier suggests in the user interface (column 7, lines 9-41).

Claim 17 adds into claim 14, and similar claims 23, 26, "said at least one script causes the computer-storable object to link to an external database or application upon a predetermined event" which would have been obvious because Hagmeier input data files can come from an external database.

Claim 18 adds into claim 17 "said predetermined event is selected from the group consisting of a mouse click on the object in the viewing application and a mouse rollover on the object in the viewing application" which Hagmeier suggests in the user interface (column 7, lines 9-41).

Claim 19 adds into claim 1 "said computer-storable object is stored in a scalable vector graphics format file" which would have been obvious because Hagmeier data file can be any well known type of data base such as a scalable vector graphics format file.

Claim 20 adds into claim 19 "said scalable vector graphics format is selected from the group consisting of SVG and SWF" which Hagmeier suggests in column 1, lines 45-48, and Happort in column 12, lines 45-54.

As per claim 27, Hagmeier teaches the claimed "method of viewing a parts diagram" comprising the steps of: (a) obtaining a data file (Hagmeier, column 7, lines 10-20); (b) for each entity in the drawing, identifying at least one vector graphic within the data file (Hagmeier, column 7, lines 35-41); (c) creating a computer-storable object that is comprised of the identified at least one vector graphic (Hagmeier, column 8, lines

1-8); and (d) attaching metadata to the computer-storable object (Hagmeier, column 8, lines 33-42). It is noted that Hagmeier does not teach that the data file is a drawing. Rappoport teaches that the CAD data file can be a drawing (Rappoport, column 16, Table 1) in which the objects is approximated by the parameter functions representing the objects. Thus, it would have been obvious to a person of ordinary skill in the art at the time the invention was made, in view of the teaching of Rappoport, to configure Hagmeier's method as claimed because the approximation of a 3D object in a drawing by a set of parameter functions representing the outlines or boundaries of object has been widely known in the computer graphic art.

Claims 27-33 are rejected under 35 U.S.C. 103(a) as being unpatentable over MAZUMDER (6,580,959).

As per claim 27, Mazumder teaches the claimed "Remote system, wherein every part in the parts diagram is stored as a separate object, and every part is linked to information stored in an external application that is specific to that part" (Mazumder, figure 2), such that "a predefined event will cause information specific to that part to be displayed with the part in the web browser" (Mazumder, column 3, lines 40-55). It would have been obvious that Mazumder's remote system is a web broeser because Mazumder Internet can be used to brow all the webpages connected to the network.

Claim 28 adds into claim 27 "each part is stored in an SVG format file" which would have been obvious because Mazumder's CAD format can be any well known format such as an SVG format file.

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Claim 29 adds into claim 27 "said part-specific information is selected from the group consisting of price, availability and location" which would have been obvious because Mazumder location of local manufacture site (column 3, lines3-18) suggests the location and availability of the goods.

As per claim 30, Mazumder teaches the claimed "method of viewing a parts diagram in an application on a remote device" (Mazumder, figure 2), such that "every part in the parts diagram is stored as a separate object, and every part is linked to information stored in at least one external application that is specific to that part, such that a predefined user interaction event will cause information specific to that part to be displayed with the part in the remote device applicationr" (Mazumder, column 3, lines 40-55). It would have been obvious that Mazumder's remote system is a mobile device because Mazumder remote device can be used to connect to the network of the mobile devices.

Claim 31 adds into claim 30 "each part is stored in an SVG format file" which would have been obvious because Mazumder's CAD format can be any well known format such as an SVG format file.

Claim 32 adds into claim 30 "said part-specific information is selected from the group consisting of price, availability and location" which would have been obvious because Mazumder location of local manufacture site (column 3, lines3-18) suggests the location and availability of the goods..

Claim 33 adds into claim 30 "said mobile device is selected from the group

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consisting of a handheld computer, a pocket computer and a personal data assistant" which would have been obvious because Mazumder remote device can be used to connect to the network of the handheld computer, a pocket computer and a personal data assistant.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Phu K. Nguyen whose telephone number is (703)305 - 9796. The examiner can normally be reached on M-F 8:00-4:30.

The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Phu K. Nguyen
February 23, 2004


